HERPETOLOGICAL MISCELLANEA

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XII.—THE FAMILY SCINCIDAE IN WESTERN AUSTRALIA

PART I—THE GENERA TILIQUA, TRACHYSAURUS AND EGERNIA

FAMILY: SCINCIDAE Skink Lizards

The skinks are perhaps the most familiar members of our lizard fauna because so many of the species are active in the day-time. With one or two exceptions their surface is smooth and shining even if keels are present on the seales. The best known exception is the Bob-tail, *Truchysaurus rugosus*, so often misnamed "Bob-tailed Goanna."

The limbs may be well developed and functional, reduced to mere bulbs, or even entirely absent externally. The tail is fragile and may be replaced but the replacement usually does not resemble the stump in markings and coloration.

In numbers of species and individuals skinks exceed all other kinds of Australian lizards.

The heads of skinks are covered with plates, not seales, which are important in the identification of genera and species. At the front of the head is the rostral behind which are two nasals containing the nostrils. These may be divided horizontally to form supranasals. These in turn are followed by the frontonasal, a large shield usually broader than long, which may be in contact with the rostral or separated from it by the nasals. It may be in contact also with the frontal if the prefrontals do not intervene. Over the eyes are usually four supraoculars, between which and the orbit is a narrow band of supraciliaries. The frontal is always longer than wide, is in contact with two or three supraoculars and followed by the frontoparietals, parietals and interparietal. In Egernia and Tiliqua this shield separates the parietals; in Lygosoma and Ablepharus it does not do so and they meet behind it. They may be followed by one or more transversely enlarged shields, the nuchals. The shields of the upper lip are known as upper labials, those of the lewer lip are lower labials. Several shields behind the eyes are known as temporals.

The Western Australian genera may be distinguished by the following key.

A.	Parietals in contact behind the interparietal.
	a. Lower eyelid moveable Lygosoma
	aa. Lower eyelid fixed disk Ablcpharus
В.	Parietals separated by the interparietal.
	b. Tail short, stumpy Trachysaurus
	bb. Tail normal, pointed.
	e. Lateral teeth pointed erowns Egernia
	ee. Lateral teeth with spheroidal erowns Tiliqua

GENUS TILIQUA

The lizards of this genus have the parietals separated by the interparietal. The nostril is in a single nasal and has a groove behind or below. There is a complete series of shields between the orbit and the upper labials. The frontoparietals and the interparietals are distinct. The lateral teeth have spheroidal or conical crowns. The limbs are short but functional, and have 5 digits with undivided transverse lamellae below. The genus differs from Lygosoma and Ablepharus in having the parietals separated by the interparietal.

KEY TO THE SPECIES

Tail longer than the head and body; eoloration more or less variegated luctuosa

Tail shorter than the head and body; eoloration not variegated.

- (a) 5 or 6 prominent dark erossbands o. occipitalis
- (b) 12 or 15 irregular erosshands o. multifasciata
- (e) Crossbands limited to the sides, faint or absent dorsally scincoides intermedia
- (d) No crossbands, back and sides with small dark spots.
 - (a) 3 or 4 dark patches on the side of the neek branchialis
 - (b) Patches absent, face and lips darker _____ melanops
 - (e) Under surface spotted, a much attenuated form gastrostigma

Tiliqua scincoides intermedia Mitchell Northern Blue Tongue

This, the largest species of the genus and which may measure 23 in. in length, can easily be separated by the presence of 2 enlarged anterior temporal seales, the frontonasal in contact with the rostral and the prefrontals forming a median suture. These characters make identification easy when a comparison is made with the other larger species, *occipitalis*. Seales smooth, the laterals smallest. Fore limb as long as the distance from the tip of the snout to the ear opening, 3 to 4 times in the distance from the axilla to the groin. Hind limb rather longer. Tail shorter than the head and body, eylindrical, tapering to a point.

The largest specimen in the W.A. Museum collection measures 435 mm., head and body 275, tail 160, fore limb 53, hind limb 53.

The colour of the individuals from the Kimberley District differs considerably from the normal form of south-eastern Australia.

The head is covered with a fine buffy reticulation over russet brown, sharply separated at the back of the head from the paler body where each seale bears one or more ferruginous streaks. On the nape, where the seales are transverse, 3 or sometimes 5 longitudinal ferruginous streaks result. On the body where the seales are oblique no distinct pattern is developed beyond the more or less indistinct series of about 7 transverse bands, which are most pronounced laterally. The under surface is immaculate pale yellowish. The markings on the tail and limbs resemble those on the back. There are no indications of dark marks on the side of the neck.

As far as is known the species is represented in the far north only.

Tiliqua occipitalis (Peters) Western Blue Tongue Lizard

This larger member of the genus, which may attain a length of 18 in., is the most strongly marked species owing to the sharp contrast between the pale brown body colour and the bone brown cross bands on the body and tail. There are 38 to 42 rows of seales round the middle of the body, all smooth and shining. Behind the parietals there are 3 or 4 series of enlarged seales, some of them much longer than wide, to which the lizard probably owes its specific name. The seales on the nape by contrast are much reduced in size and markedly wider than long. In due course these are succeeded by larger transverse seales slightly obliquely placed and increasing in size somewhat towards and on the tail. The limbs are short, not meeting when adpressed; the fore limb is as long as the head and about 3 times in the distance between the axilla and the groin. The tail is short, tapering and pointed, much shorter than the head and body, with four dark cross bands and a dark tip. A dark stripe along the side of the head, from the eye to over the ear, is very pronounced on all specimens examined.

The distribution is very wide, from Geraldton southwards and

to the South Australian border.

Tiliqua occipitalis multifasciata Sternfeld Desert Western Blue Tongue Lizard

This subspecies, described by Sternfeld in 1919, is the *Tiliqua* occipitalis nossiteri of Glauert, 1923, and the *Tiliqua* occipitalis auriculare of Kinghorn, 1931. It differs from the southern form in possessing a much larger car opening with five lobules, and in colour markings.

The coloration is very distinctive, there being from 12 to 15 eross bands on the body and from 10 to 12 on the tail. This is probably due to the subdivision of the broader bands on the southern form, a tendency towards which is now and again indicated on specimens otherwise normal.

This subspecies is known from Central Australia (Hermannsburg), the Northern Territory and northern Western Australia. In this State it has been collected in East and West Kimberley, Wallal

and Mardie Station near the Forteseue River.

A specimen from Hermannsburg measured: head and body, 230 mm.; tail, 94; and total length, 324. One from Wallal was 310 mm. overall.

Tiliqua luctuosa (Peters) Mourning Skink

This small species, the largest specimen recorded measures $13\frac{1}{2}$ inches, differs from all other Western Australian Tiliquas in its bright coloration and from the Egernias, which it closely resembles in appearance, by its typical tiliquan dentition. The scales are smooth and number from 24 to 26 round the middle of the body. The adpressed limbs meet or slightly overlap and the fore limb is as long as the distance from the tip of the snout to the centre of the ear, and from $2\frac{1}{8}$ to $2\frac{1}{2}$ times in the distance between the axilla

and the groin. The tail is round, tapering and longer than the head and body.

The colouring is variable and varied. Dark blotches or pale markings may form a vertebral band outside which is a contrasting area. This is followed by a lateral band which, if black, carries numerous small white spots, and if pale has an abundance of dark markings. The under surface is immaculate. An Albany specimen measures 285 mm. (114 in.), head and body, 100; tail, 185.

The distribution seems to be the South-West. In the Museum are two specimens from the Perth area, the others coming from the extreme south.

Tiliqua branchialis (Gnthr.) Gunther's Skink

This small short-limbed species is very attenuated, the distance from the tip of the snout to the fore limb being contained from 2 to to $2\frac{1}{2}$ in the distance from the axilla to the groin. Snout short, lower eyelid scaly, 5th upper labial under the eentre of the eye, 6th largest. Ear opening small with a single lobule. Three pairs of enlarged nuchals. Scales round the body smooth, the two vertebral series the largest, and the laterals smallest. Limbs short, the fore limb shorter than the head and nearly 5 times in the distance between the axilla and the groin; hind limbs slightly longer. Tail shorter than the head and body.

The colour varies. Speeimens from Newmarracarra near Geraldton are pale brown above with a black spot or short stripe on each scale and series of black spots forming lines from the side of the head to the chin and throat, together with 3 large black spots on each side of the neck.

The species is known from Geraldton on the west coast.

Tiliqua gastrostigma (Blngr.)

Body much elongate, the distance between the tip of the snout and the fore $\lim_{n\to\infty} 1$ from $2\frac{1}{2}$ to 3 times in the distance between the fore limb and the hind limb. The younger and smaller individuals are shorter. Snout short; lower eyelid scaly; nostril in a single nasal with a groove behind. Rostral separated from the frontonasal, which is broader than long and forms a suture with the frontal. Frontal about twice as long as wide, as long as its distance from the tip of the snout, in contact with 2 of the 4 suboculars of which the second is the largest. Interparietal about twice as long as the frontoparietals; 2 or 3 pairs of nuchals. Ear opening about as large as the eye with a small white lobule, 5th or 5th and 6th upper labials under the eye. There are 26 smooth scales round the middle of the body, median pair of dorsals the largest, laterals the smallest; no enlarged preanals, gulars and ventrals smooth, the median pair under the tail enlarged. Limbs short, when adpressed they do not meet; 3rd and 4th toes equal. Largest speeimen recorded 94 in. (245 mm.). Uniform olive brown above, seales often with a pale edge or black dot. Below almost white, nearly every scale with a black dot, which may be faint.

It occurs in the Pilbara District.

Tiliqua melanops (Stirling & Zietz)

A small short-limbed species with the distance between the snout and the fore limb about 2½ times in the distance between the fore limb and the hind limb. Snout short, lower eyelid sealy, 5th upper labial under the eye; nasals forming a suture behind the rostral, a groove behind the nostril; frontonasal forming a suture with the frontal which is longer than its distance from the tip of the snout and in contact with 2 of the 4 supraoculars, 6 supraciliaries; interparietal about twice as long as the frontoparietals and separating the parietals. Ear opening about as large as the eve with a small white lobule which may be minute or absent. There are 26 smooth seales round the middle of the body, 2 or 3 enlarged nuchals; no enlarged preanals. Limbs short, when adpressed they do not meet, 3rd and 4th toes equal. Tail about as long as the head and body, as in the dorsals the two vertebral series are enlarged, also the median pair below. Grows to about 6 in. Olive brown above, many of the seales with a black dot; in young specimens these may be absent, face and lips darker.

Occurs near Perth and eastwards to the goldfields and South Australia. *T. branchialis, T melanops* and *T. gastrostigma* are structurally almost identical so that they may be geographical races of the first-named and not separate species.

Trachysaurus rugosus Gray Stumpy Tail or Shingle Back

This quaint lizard, the only species of the genus, is closely related to the blue tongues, *Tiliqua*, having the same kind of enlarged spherical teeth laterally but differing so markedly from members of that genus that it is given a generic name of its own.

The head is short and thick with a pointed snout, the body somewhat elongated thick and depressed, the limbs short but still functional and the tail short and flattened. The head, back and upper surface of the tail are covered with thick convex rugose shields and scales which become thicker with age. On the head many supplementary shields have been developed but it is possible to recognise those of diagnostic importance. The frontonasal is larger than the frontal. In all specimens examined with one exception the parietals are separated by the interparietal behind which the scales gradually increase to the back of the head. On the body the obliquely-arranged scales are largest on the vertebral area, gradually decreasing in size laterally until they merge into the smooth transverse scales of the ventral surface. The limbs and the under surface of the tail are also smooth.

The coloration is very variable. It may be darker or lighter brown with paler spots or irregular cross bands or dark brown with peppering or light spottings of pale yellow or even whitish.

The under surface may be pale with dark lines between the transverse scales, have yellowish brown blotches or even more or less developed irregular cross bands as shown by individuals from Bernier Island and by some mainland specimens.

The lizard is very widely distributed in this state south of the tropies. The Museum has specimens from Bernier Island and it is

known from Dirk Hartog. At the Abrolhos Is, the normal coloration prevails, but on Rottnest I, the dark pigmentation is intense, with fine white peppering on the upper surface together with black longitudinal streaks laterally and below; the limbs also are marked in black and white. Specimens throughout the Wheat Belt and South-West appear to be normal in coloration.

GENUS EGERNIA

This genus includes some of the largest skinks known to occur in Australia. They are heavily built and usually have the tail as long as or longer than the head and body, except in the two spiny-tailed species in which they are markedly shorter.

Most of them have the scales smooth which in some of the species bear more or less well developed keels on the upper surface of the body, tail and limbs. On the head the parietals are separated by the interparietals as in *Tiliqua*.

KEY TO THE SPECIES

- Tail subcylindrical almost as long or longer than the head and body.
 - a. Dorsal scales smooth or striated.
 - b. No groove behind the nostril, eyelids and ear lobules white whitii
 - bb. Groove behind the nostril, eyelids and lobules not white.
 - e. Complete series of infraoculars.
 - d. Size large (up to 15 in.) kintorei
 - dd. Size small (up to 9 in.) inornata
 - cc. Series of infraoculars not complete formosa aa. Dorsal scales keeled.
 - e. Keels wcak, markings bright napoleonis
 - Keels strongly developed, markings not outstanding.
 - f. Size large, 7th and 8th upper labials enter the eye, markings pale linear or dark and light speekled _____ kingii
 - ff. Size small, 6th and 7th upper labials enter the eye, markings dark, varied, lips white carinata
- II. Tail flattened, short, very spinose, Caudal scales above with one spine ______ stokesii Caudal scales above with 3 spines _____ depressa

Egernia carinata Smith Smith's Skink

This small skink, the largest known specimen measures 10 in. (255 mm.), has a long subcylindrical tail, longer than the head and body. The dorsal and caudal scales are pluricarinate; there is an incomplete scries of suboeulars, a post nasal groove, 7 or 8 upper labials, with the 5th and 6th or 6th and 7th under the eye, and 7 lower labials.

The head is somewhat flattened and slender covered with roughened shields, frontonasal narrowly in contact with the rostral or separated by the nasals, also often separated from the frontal by the prefrontals which may form a short or pin point median suture. Frontal about $1\frac{1}{2}$ times as long as wide, as long as and wider than the interparietal. Three pairs of pluricarinate nuchals. Dorsal seales on body and tail bi-or tri-carinate on the limbs also. Under surface smooth.

The eoloration has been described as "dorsal, ground colour grey-brown with an ill defined dark dorsolateral stripe extending from the temporal region to about halfway along the body where it breaks up into an irregular series of spots. Three to five longitudinal series of quadrangular spots, each half the width of a scale, extend along the body and often along the tail also. In several specimens these spots have lost their serial arrangement and are seattered irregularly." The sides are often black and white spotted and the under surface, uniformly pale with blackish markings on the chin. The auricular lobules and the upper and lower labials white, the latter dark edged in many of the specimens.

The distribution is South-Western Australia and adjacent islands, from the vicinity of Perth and Rottnest to the Archipelago of the Recherche and inland to Norseman.

Egernia kingii (Gray) King's Skink

This is the largest of our Egernias. It may attain a length of 22 in. (560 mm.) and is easily recognised by its colour pattern, which usually eonsists of pale longitudinal lines along the back and tail though a speekled form is often met with. In its young stages it is white-spotted above and black-spotted below. Specimens from the southern islands are darker.

The tail is subeylindrieal and longer than the head and body. The head is normal and eovered with rugulose shields, the frontonasal is in contact with the rostral and separated from the frontal by the prefrontals which form a median suture. The frontal is from 1-3 to 1½ times as long as wide. The interparietal is long and narrow, sometimes as long as the frontal but much narrower; 9 or 10 upper labials with the 6th and 7th or more often 7th and 8th under the eye, no complete series of suboculars; a groove behind the nostril. The vertical diameter of the ear opening is as long as the horizontal diameter of the eye, with three or four lobules. Usually 3 pairs of multicarinate nuchals, dorsals and upper caudals with 2 or 3 keels. Under surface smooth but striate on the tail. The adpressed limbs overlap having two- or three-keeled scales above. There are 34 to 40 seales round the middle of the body.

The known distribution is on islands off the west and south eoasts, from the Dirk Hartog Island to the Archipelago of the Reeherehe, and inland as far as the Great Southern Railway to Toolbrunup, between Gnowangerup and Tambellup.

Egernia napoleonis (Gray) Napoleon's Skink

This is a small species, less than 12 in. in length, with a sub-eylindrical tail which may be twice as long as the head and body.

The head is normal, fronto-nasal in contact with the rostral and separated from the frontal by the prefrontals which form a median suture. Frontal nearly 1½ times as long as wide, longer and wider than the narrow interparietal; 5 supraoculars, the 2nd the largest, series of infraoculars incomplete; 7 upper labials, the 5th and 6th under the eye, oecasionally 8 with the 6th and 7th under the eye. A groove behind the nostril. One pair of enlarged nuchals. Dorsal scales with 2 or 3 weak keels, basal portion of the tail with feebly developed keels, the rest together with the limbs and the whole of the under surface smooth. The adpressed limbs meet or slightly overlap.

The coloration of spirit specimens is light olive brown, head above with darker markings or spots and narrow edges to the upper labials, eyelids and the 2 or 3 lobules lighter in some cases. A pale vertebral band, about 2 scales wide, extends from the nape on to the tail and is flanked by bands of dark brown, again 2 scales wide each with a row of white spots which also reach to the base of the tail. A thin pale line separates the dorsolateral band from the side which may be dark spotted or marbled. The distal portion of the tail above may be covered with light-edged scales. The whole of the under surface of body, tail and limbs a uniform pale olive-brown, paler than the ground colour of the upper surface.

The lizard inhabits the extreme south of the State, it has been found on Eclipse Island, near Albany and inland as far as the Stirling Range and Ongerup.

It seems to be rare and acts in its area as the representative of the widespread *Egernia whitii*, to which it is closely related.

Egernia formosa Fry Fry's Skink

This is a typical small, smooth skink measuring up to 11¼ in, (285 mm.) in total length. The head is rather broad and the body normal; the adpressed limbs in the female overlap so that the hind foot reaches the wrist, and the tail is longer than the head and body; groove behind the nostril, the frontal 1 1-3 to 1½ times as long as broad; interparietal as long as the frontal; 3 pairs of enlarged nuchals. There are 7 upper labials, the 5th and 6th under the eye; ear almost as long as the eye, with from 2 to 4 lobules. No complete series of infraoculars. Body scales smooth or feebly striated, those on the sides smallest. Scales on the tail above not transversely enlarged.

Colour is variable, dark or yellowish olive above, the head shields are plain or with dark markings; two dark bands start at the back of the head but soon break up into rectangular spots along the back and on to the tail; outside these are a series of spots starting on the nape and likewise extending on to the tail. A wide dark brown stripe starts behind the nostril and proceeds through the eye and over the ear and shoulder to the side of the body where it disappears. Above this and below the dorsolateral band are seattered dark spots. The under surface is pale yellowish, the throat reticulated with dark brown, the limbs are plain brown above, their under

surface and that of the tail are pale like the ventral surface of the body.

The distribution is very widespread. It is known from near Perth, Cottesloe Beach, West Wallaby Island (Abrolhos), Pindawa and the "Goldfields." It is not common.

Egernia inornata Rosen Rosen's Skink

This small species from the more arid regions may attain a length of about 9 in. (230 mm.). It has a tail slightly longer than the head and body, is one of the smooth scaled forms with a faint groove behind the nostril, a complete series of infraoculars, 4 upper labials in front of the 5th or 5th and 6th, which are under the eye, and a single pair of nuchals. The distance from the tip of the snout to the fore limb is about $1\frac{1}{2}$ times in the distance from the axilla to the groin; the adpressed limbs overlap.

The coloration is variable. A description reads: "the ground colour varies from rusty red through pink tinged eream to light fawn. Dorsal surface uniformly coloured, irregularly speekled with black or with regular longitudinal striations." These may extend on to the tail and be replaced laterally by numerous oblique stripes. There may also be distinct cross banding on the tail. A small specimen from Queen Victoria Springs closely resembles the markings of young Egernia whiti.

Specimens have been recorded from Merlinleigh Station, about 100 miles E.N.E. of Carnarvon, between Wells 48 and 50 on the Canning Stock Route, near Merredin, Fraser Range, and between Fraser Range and Queen Victoria Spring. It is also known from the Northern Territory, Central Australia and South Australia.

The lizard is closely related to Lord Kintore's Skink and is found in the same general area but has a more extensive range. It is also smaller when full grown.

Egernia kintorei Stirling & Zietz Lord Kintore's Skink

This large desert skink may attain a length of 15½ in. (390 mm.). It is one of the smooth-scaled forms with a postnasal groove, a complete series of infraoculars and 5, sometimes 6, upper labials in front of the first under the eye. There is usually only one pair of enlarged nuchals and the scales on the upper surface of the tail are not transversely enlarged in any of the specimens examined. The adpressed limbs slightly overlap; the distance from the tip of the snout to the fore-limb is 1\frac{1}{4} times the distance from the axilla to the groin; the tail is longer than the head and body and tapers to a sharp point. The colour in life is said to be "red brown above with faint darker lines running longitudinally between the series of scales. Faint vertical barring on the flanks. Ventral surface pale yellow." The specimens in the Museum were similar on arrival but have now faded. There are traces of cross banding on the tail. The whole of the under surface is immaculate, as also is the entire fore limb and the under surface of the hind limb, the upper part of the latter being mottled lighter and darker in some cases.

The distribution is the far interior, where specimens have been collected on the Canning Stock Route, the Great Victoria Desert, and inland from Broome (*Egernia dahlii* Boulenger).

Egernia whitii (Lacep.) White's Skink

A small skink which may attain a length of 8½ in. (219 mm.) belonging to the group with smooth or striated, not keeled scales. The head is normal in outline and eovered with slightly swollen shields, the frontonasal is in contact with the rostral and usually separated from the frontal by the prefrontals which have a median suture or have just a pinpoint contact. The frontal is slender, twice as long as wide, narrower but longer than the interparietal and in contact with the first two supraoculars. Usually 8 upper labials with the 6th and 7th under the eye, when there are only 7 then the 5th and 6th are in that position. There is no groove behind the nostril. A complete series of infraoculars, one pair of enlarged nuchals. Scales on the body, tail and limbs all smooth without the faintest traces of keels.

The eoloration is somewhat variable, in most cases the head is pale olive brown, a colour which continues as a vertebral stripe 2 scales wide, a fine dark line separating the two scales, the rest of the dorsal surface is blackish profusely sprinkled with white spots which may cover indistinct cross bands in the adults. On the sides the coloration is less intense, the tail has numerous dark cross bands, the under surface is blue-grey but there are dark lines on the chin. The upper and lower labials are pale, the individual shields having dark edges in most cases. The eyelids and the lobules in the car are consistently white.

The distribution of this eastern species is restricted to the south coast east of Albany, and inland to Ongerup and the Great Victoria Desert. It has also been collected on Bernier I. in Shark Bay.

Egernia stokesii (Gray) Large Spiny-tailed Skink

This and the Small Spiny-tailed Skink are easily separated from their kin by their short and spiny tails and therefore require no detailed description. The Large Spiny-tailed Skink has the body somewhat flattened and covered above with scales bearing 2 or 3 keels each ending in a sharp spine. On the sides the seales bear but a single keel. On the tail on the other hand the keels are absent being replaced by a single well developed semi-erect spine. The limbs are also keeled and spinose above but the whole of the under surface is smooth. It grows to $9\frac{1}{2}$ in. (240 mm.). It is light brown with darker markings which may form irregular cross bands on the body and tail and are less intense than the markings on the smaller species; the under surface is uniform drab.

For the separation of young specimens from the individuals of the smaller species, three characters may be mentioned: (1) The unicuspid scales on the tail. (2) The frontonasal is in contact with the rostral. (3) The sixth upper labial enters the eye. The Small Spiny-tailed Skink on the other hand has: (1) The tricuspid scales on the tail. (2) The nasals in contact, thus separating the frontonasal from the rostral. (3) The fourth upper labial enters the eye. Small specimens of the smaller species may have the spines on the tail still unicuspid but the other characters are valid.

The distribution is Western Australia south of the Murchison and inland to the Koorda district. Specimens have reached the Museum from as far south as Yarloop and the species is known from the Houtman's Abrolhos.

Egernia depressa (Gnthr.) Small Spiny-tailed Skink

This little species, its maximum size appears to be about 6 in. (150 mm.), may at first sight be mistaken for the young of the larger spiny-tail. But a closer examination reveals its distinctive characters. The body and tail are both flattened and covered above with keeled or spiny scales. On the back they carry 3 keels which on the tail terminate in 3 spines, the central being the largest. The scales on the limbs are distinctly spinose on the supper surface. The entire under surface is smooth and shining. It is not uncommon for the dorsal scales to be worn through friction with the stones or rocks that form the lizard's retreat.

The distinctive characters are listed under the description of the larger species.

The coloration is variable, specimens preserved in spirits are light olive brown above with intense dark markings developing behind the head towards and on the tail making irregular cross bands. The under surface is immaculate pale olive or with a few dark dots.

The distribution is limited to Western Australia south from Well 46 on the Canning Stock Route and Abydos Station in the North-West. It is recorded in the Laverton and Kalgoorlie districts and south to Hopetoun. It is known from Beverley but is absent from the Perth coastal plain though specimens have been sent to the Museum from Perth and Fremantle where they probably arrived in consignments of sandalwood.

FROM FIELD AND STUDY

Record of the Frog Notaden nichollsi near Port Hedland.—Two specimens of this species (male, 63 mm. and female, 48 mm.) were collected 12 miles inland from Port Hedland on the Port Hedland-Marble Bar road on January 20, 1958, at about 2300 hours. Hitherto this species has been recorded from various localities in the Kimberleys and at an unidentified locality at the northern end of the No. 1 Rabbit Proof Fence (H. W. Parker, Novitates Zoologicae, 42, 1940: 64). This report therefore offers a more precise locality for a north-west occurrence.